



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/625,098	07/22/2003	Hiroki Akano	FUJA 20.519 (100794-00459)	8771
26304	7590	04/14/2004	EXAMINER	
KATTEN MUCHIN ZAVIS ROSENMAN 575 MADISON AVENUE NEW YORK, NY 10022-2585			SOTOMAYOR, JOHN	
			ART UNIT	PAPER NUMBER
			3714	

DATE MAILED: 04/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/625,098

Applicant(s)

AKANO, HIROKI

Examiner

John L. Sotomayor

Art Unit

3714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 7/22/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Response to Amendment*

1. In response to the amendment filed 11/26/2003, claims 14-34 are canceled and claims 1-13 are pending.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-6, 8-11 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Marshall et al (US 5,215,464).

Regarding claim 1, Marshall et al discloses a laser transmitter/receiving system for target practice in which a laser transmitter is provided with a modulator for modulating a laser signal by position information of the laser transmitter (Col 3, lines 49-62), an information extractor for extracting position information from a received laser signal (Col 3, lines 62-66), and a judgment unit for judging a shot effect using the extracted position information (Col 4, lines 3-15).

Regarding claim 2, Marshall et al discloses a laser transmitter/receiving system for target practice in which a laser transmitter transmits a modulated laser signal in response to a signal from a shooting apparatus of a weapon (Col 6, lines 18-38).

Art Unit: 3714

Regarding claim 3, Marshall et al discloses a laser transmitter/receiving system for target practice in which the position information of the laser transmitter side is the position information output from a shooting side position finder of said laser transmitter side (Col 4, lines 2-15).

Regarding claim 4, Marshall et al discloses a laser transmitter/receiving system for target practice in which the position information is the most recent position information in the continuously recorded position information (Col 4, lines 10-15).

Regarding claim 5, Marshall et al discloses a laser transmitter for target practice comprising a modulator for modulating a laser signal by position information of the laser transmitter side (Col 8, lines 1-14).

Regarding claim 6, Marshall et al discloses a laser transmitter for target practice in which the position information of the laser transmitter side is the position information output from a shooting side position finder of said laser transmitter side (Col 4, lines 2-15).

Regarding claim 8, Marshall et al discloses a laser transmitter for target practice in which the position information of the laser transmitter side is the position information output from a shooting side position finder of said laser transmitter side (Col 4, lines 2-15).

Regarding claim 9, Marshall et al discloses a laser transmitter for target practice in which a modulator for modulating a laser signal by position information, wherein a responsive laser signal is modulated by position information and transmits position information of a shooting side apparatus (Col 8, lines 1-25).

Regarding claim 10, Marshall et al discloses an apparatus for target practice in which a judgment unit for judging the shot effect using position information from a received laser signal (Col 4, lines 3-15).

Art Unit: 3714

Regarding claim 11, Marshall et al discloses an apparatus for target practice comprising a judgment unit for judging a shot effect in accordance with a distance obtained from position information extracted from received laser signal and position information of the own receiver side (Col 10, lines 7-21).

Regarding claim 13, Marshall et al discloses a controller for transmitting position information to a laser transmitter provided with a modulator for modulating a laser signal by the position information, wherein responsive position information of the modulator is transmitted to the laser transmitter (Col 8, lines 1-25).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 7 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marshall et al in view of Eichweber (US 4,695,256).

Art Unit: 3714

Regarding claims 7 and 12, Marshall et al discloses a laser transmitter and apparatus for target practice comprising a judgment unit for judging the effect of a shot based upon position information (Col 10, lines 7-21). Marshall et al does not specifically disclose varying munition type (claim 7) or a munition type parameter recorder for recording munition type parameters for each shot munition type (claim 12). However, Eichweber teaches that munition type parameters can be fed into a control and computing unit that include such munition type information as munition type and ballistic data for each munition type (Col 6, lines 44-48). Therefore, it would have been obvious to one of ordinary skill in the art to provide an apparatus for target practice comprising a judgment unit for judging the effect of a shot based upon position information as disclosed by Marshall et al with a munition type parameter recorder for recording munition type parameters for each shot munition type as taught by Eichweber for the purposes of providing greater flexibility in training users of the system for a plurality of munition types.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Von Bennigsen (US 3,965,582) for a discussion of the use of laser guidance and targeting systems.

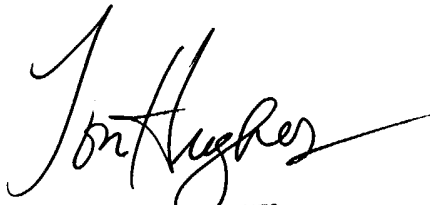
Any inquiry concerning this communication or earlier communications from the examiner should be directed to John L Sotomayor whose telephone number is 703-305-4558. The examiner can normally be reached on 6:30-4:00 M-F.

Art Unit: 3714

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Hughes can be reached on 703-308-1806. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jls  
April 9, 2004



S. THOMAS HUGHES  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700